

NAMAN YESHWANTH KUMAR

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EDUCATION

Master of Science

Arizona State University - Computer Eng (GPA 3.8/4.0)

Expected: May 2026

Tempe, AZ

- Relevant course work: VLSI, Foundations of Algorithms, Reinforcement Learning in Robotics, Artificial Intelligence, Perception in Robotics, Hardware Co-design, SoC Design, Advanced Computer Architecture

Nanodegree - Self-Driving Car Engineer

February 2023

Udacity

- Key Areas: Machine Learning, Sensor Fusion, Computer Vision, Path Planning, and Control, with hands-on projects in object detection, trajectory tracking, and autonomous vehicle motion

Bachelor of Engineering

BMS College of Engineering - Electrical and Electronics Eng

June 2022

Bengaluru, India

TECHNICAL SKILLS

Systems Programming: C++ | Python | System Architecture | Software Infrastructure | Performance Optimization | Profiling | Benchmarking

Autonomous Systems: ROS 2 | Sensor Fusion | Path Planning | Computer Vision | Perception | LiDAR | Multi-platform Deployment

Software Engineering: Docker | Git | CI/CD Pipelines | AWS | Asynchronous Programming | API Design | Distributed Systems

Robotics & AI: Machine Learning | TensorFlow | PyTorch | Reinforcement Learning | Simulink | CoppeliaSim | MATLAB

Tools & Hardware: Linux | Shell Script | ARM | Raspberry Pi | Arduino | Database (SQL) | Data Analytics

WORK EXPERIENCE

Software Developer

NCR GOLD

October 2022 - April 2024

Bengaluru, India

- Designed and deployed a custom ordering platform (Django) to streamline inventory and billing for a wholesale jewelry business; processed 10,000+ orders to improve efficiency.
- Containerized applications using Docker and integrated AWS cloud deployment, providing scalable performance and seamless updates.

Research Intern

Indian Institute of Science

October 2021 - August 2022

Bengaluru, India

- Led the Propulsion Circuit Team, optimizing a 1.5kW axial flux BLDC motor with Ansys Maxwell; boosted efficiency and responsiveness by upgrading material and coil designs and implementing a new FOC system.
- Conducted advanced research on speed control algorithms and battery management systems for eVTOL aircraft leveraging Simulink, contributing to notable improvements in efficiency and reliability of aircraft propulsion systems.

PROJECT EXPERIENCE

Trezzit - Full Stack Bill Splitting Application

February 2025 - Present

- Engineered Trezzit, a full-stack expense management application that solves the dual challenges of intuitive item-wise bill splitting and integrated personal finance tracking using AI-powered categorization.
- Managed the complete project lifecycle, acquiring and supporting an initial beta community of 120+ active users from the ASU student body.
- Currently leading the next phase of growth, focused on scaling the user base to 1,000 members on campus by leveraging iterative development and community feedback. Tech Stack: Django | React | Google Generative AI (Gemini) | Material-UI | Docker

Intel Automated Self-Checkout (Open Source Contributor)

January 2025 - February 2025

- Developed C++ performance-critical modules for LiDAR sensor data processing in autonomous systems; optimized algorithms achieving 3x throughput improvement in real-time point cloud analysis through profiling and benchmarking.
- Architected Python framework with asynchronous APIs for sensor fusion and object detection; implemented CI/CD pipelines using Docker, collaborating with distributed engineering team following production software development best practices.

Raspberry Pi Self-Driving Car

February 2022 - July 2022

- Developed an autonomous vehicle using Raspberry Pi and Arduino, featuring lane detection, traffic sign recognition, and seamless integration via the I2C communication protocol.
- Streamlined data collection and neural network training with a Bluetooth joystick mode in a collaborative team effort; project received the Best Project Award in the EEE Department among approximately 40 submissions.

AWARDS & HONORS

- Won the 'Best Use of AI' award at Strategy X DevHacks'25 at ASU for developing AdaptED AI, a platform leveraging Google's Gemini AI to generate personalized learning paths and resources for students.
- Secured second place in the Hack SoDA 2024 at ASU with a team of four, developing PassGen, a secure and offline Chrome Extension for generating unique passwords, during a 24-hour hackathon sponsored by Amazon.
- Ranked among the Top Ten teams in the e-Yantra national-level robotics competition organized by IIT Bombay, for designing and developing a self-balancing dairy bike on CoppeliaSim, February 2022.